

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of Claims:

Claims 1, 2, 5, 6, 8, 9 and 11 are currently being cancelled.

Claims 3, 4 and 12 are currently being amended.

No claims are currently being added.

This amendment and reply cancels and amends claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, is presented, with an appropriate defined status identifier.

After canceling and amending the claims as set forth above, claims 3, 4, 7, 10 and 12-19 are now pending in this application.

Claim Rejections – Prior Art:

In the final Office Action, claims 1-3 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,850,716 to Kurihara in view of U.S. Patent No. 4,262,329 to Bright et al.; claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kurihara in view of U.S. Patent No. 5,606,613 to Lee; claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kurihara in view of Bright et al. and further in view of Lee; claims 6-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kurihara in view of Bright et al. and Lee and further in view of U.S. Patent No. 5,903,647 to Ronning; claims 12, 13, 18 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,058,476 to Matsuzaki et al. in view of Ronning and further in view of U.S. Patent No. 6,023,506 to Ote et al.; claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki et al., Ronning and Ote et al. and further in view of U.S. Patent No. 7,124,094 to Kobayashi et al.; claims 15 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki et al., Ronning and Ote et al. and further in view of U.S. Patent No. 7,024,500 to Ashizaki et al.; and claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki et al., Ronning, Ote et al. and Kobayashi, and further in view of Ashizaki et al. These rejections are traversed

with respect to the presently pending claims under rejection, for at least the reasons given below.

Independent Claim 3:

Presently pending independent claim 3 recites a volatile storage means and an image storage means for storing an encryption key, whereby the volatile storage means and the image storage means are provided in a separate unit different from a non-volatile storage means for storing an encryption key. Thus, even if the unit having the image storage means is stolen, an encryption key itself is prevented from being stolen.

Kurihara et al. describes that a program for a toner cartridge exchange is encrypted and stored in record medium (such as a CD-ROM), whereby when the program is used, a downloaded encrypted key is used to decrypt the program to be installed in computers.

One difference between the present invention according to claim 3 and Kurihara et al. is that a target of encryption in Kurihara et al. is a control program, whereas a target of encryption in the present invention according to claim 3 is image data for image formation. Clearly, these are much different targets of encryption.

In addition, Kurihara et al. describes a non-volatile environment configuring memory 11. However, Kurihara et al. does not teach or suggest that an encryption key is stored in the non-volatile environment configuring memory 11.

Therefore, even if the volatile storage means described in Bright is applied to Kurihara et al., a non-volatile storage means having an encryption key stored therein would not be obtained from such a combination.

Still further, unlike the present invention according to claim 3, neither Kurihara et al. nor Bright teaches or suggests an image storing means, an encryption an decryption means, and a volatile storage means being provided in a separate unit from a system control unit that contains a non-volatile storage means.

Accordingly, even if Kurihara et al. and Bright are combined, such a combination would not teach or suggest a structure as explicitly recited in claim 3.

Therefore, presently pending independent claim 3 is patentable over the cited art of record.

Dependent Claims 7 and 10:

Claim 7 recites encryption key compression and decompression means for compressing or decompressing the encryption key using a predetermined compression and decompression method, wherein the compressed encryption key is stored onto the non-volatile storage means and when the encryption key is used, the compressed encryption key is read from the non-volatile storage means.

Ronning, which is cited against claim 7 along with other prior art, describes data compression and decompression. However, the target of encryption in Ronning is a “sector”, and is not an “encryption key” as recited in claim 7.

Accordingly, claim 7, as well as claim 10 that recites similar features, are patentable over the cited art of record.

Independent Claims 12 and 18:

Matsuzaki, which is cited along with other prior art against claims 12 and 18, relates to encrypted communication between a first device and a second device, and Matsuzaki describes a method in which the first device (authorization side) authorizes a validity of the second device (verification side).

Matsuzaki also describes that a random number generated by encryption and a value (random number) generated by decryption are compared. However, unlike the present invention according to independent claims 12 and 18, Matsuzaki does not compare a plurality of inputted same encryption keys with one another. Note in particular the recitation “key values inputted by a user by a predetermined number of times”, as explicitly recited in claims 12 and 18, which is a feature lacking in Matsuzaki.

With respect to the other cited art of record, Ote describes displaying a list of encrypted files in the form of unencrypted file names (see column 6, lines 9-12 of Ote). Kobayashi et al. describes that image memory sizes are divided to transmit a part when an unoccupied capacity for an image memory is secured (see column 18, lines 41-47 of Kobayashi et al.). Ashizaki describes performing either a decimal format or a hexadecimal format (see column 15, lines 4-6 of Ashizaki). None of these secondary references rectifies the above-mentioned deficiencies of Matsuzaki.

Accordingly, independent claims 12 and 18 patentably distinguish over the cited art of record.

Conclusion:

Since all of the issues raised in the final Office Action have been addressed in this Amendment and Reply, Applicants believe that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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